

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-15 (Canceled)

16. (New) A colloidal dispersion of a rare-earth compound, wherein the rare-earth compound is in the form of colloids having a perovskite structure of formula:



wherein:

- Ln is at least one rare earth other than just cerium; and
- B is at least one element selected from the group consisting of elements of atomic number from 22 to 31, from 40 to 51, from 73 to 83 and aluminum.

17. (New) The dispersion as claimed in claim 16, wherein the rare earth Ln is partly substituted with a monovalent or divalent cation.

18. (New) The dispersion as claimed in claim 17, wherein the cation is an alkali metal or alkaline-earth metal.

19. (New) The dispersion as claimed in claim 16, wherein Ln is lanthanum or lanthanum combined with cerium.

20. (New) The dispersion as claimed in claim 16, wherein the element B is iron, manganese, cobalt, nickel, ruthenium, chromium, palladium, platinum or copper.

21. (New) The dispersion as claimed in claim 16, wherein the colloids have a mean diameter of between 5 and 200 nm, optionally between 5 and 30 nm.

22. (New) The dispersion as claimed in claim 16, having a liquid phase, which is water.
23. (New) The dispersion as claimed in claim 16, having a liquid phase, which is formed by a water-miscible organic solvent/water mixture or by a water-miscible organic solvent.
24. (New) A process for preparing a dispersion as claimed in claim 16, comprising the following steps:
- a) mixing a perovskite of formula (1), having the form of elementary crystallites at most 500 nm in size, to a monovalent acid having a pKa of between 2.5 and 5.0;
 - b) heating the mixture obtained in step a) to a temperature of between 50°C and 200°C; and
 - c) optionally, purifying the reaction mixture obtained in step b).
25. (New) The process as claimed in claim 24, wherein in step a) acetic acid is used as monovalent acid.
26. (New) The process as claimed in claim 24, wherein in step a) the perovskite is made to react with the monovalent acid in an amount such that the H^+ /perovskite molar ratio is between 0.05 and 20, optionally between 0.05 and 5.
27. (New) The process as claimed in claim 24, wherein the perovskite used in step a) is obtained by a process wherein an aqueous mixture of salts of the elements Ln and B and, optionally, the aforementioned monovalent or divalent cation is formed, said mixture is made to react with a base under basic conditions, whereby a precipitate is

obtained, and the precipitate obtained is calcined at a temperature of at least 450°C.

28. (New) The process as claimed in claim 27, wherein an aqueous mixture of salts of the elements Ln and B with a superstoichiometric Ln/B ratio is formed.

29. (New) The process as claimed in claim 27, wherein, during the reaction or after the reaction of the salts of the elements Ln and B with the base, and before calcination, an organic compound selected from the group consisting of carboxylic acids, amino acids, polyacrylic acids, their salts and alkylamines is further added to the reaction mixture or to the mixture after the reaction.

30. (New) The process as claimed in claim 27, wherein the precipitate is further made to undergo a flash calcination at a temperature of between 800°C and 1200°C.

31. (New) A composition in solid form, obtained by evaporation, freeze drying, centrifugation, ultrafiltration or osmotic compression of a dispersion as claimed in claim 16.

32. (New) A composition in solid form, obtained by evaporation, freeze drying, centrifugation, ultrafiltration or osmotic compression of a dispersion made by a process as claimed in claim 24.